

Atty. Dkt. No. 041673-2053

CLAIMS AS AMENDED WITHOUT MARKUPS

1. (Presently Amended) A method to stimulate or support cortical neurons in a subject's brain, the method comprising delivering a nervous system growth factor composition consisting of brain-derived neurotrophic factor (BDNF) or NT-4/5 to neurons in cortical tissues containing *trkB* receptors.
2. (Currently Amended) The method according to Claim 1, wherein practice of the method produces an improvement in cognitive function in the treated subject.
3. (Cancelled.)
4. (Cancelled.)
5. (Cancelled.)
6. (Currently Amended) The method according to Claim 1, wherein the BDNF or NT-4/5 is delivered by *in situ* expression from a recombinant expression vector.
7. (Original) The method according to Claim 6, wherein the recombinant expression vector is a lentiviral vector.
8. (Original) The method according to Claim 7, wherein the lentiviral vector is HIV-1.
9. (Currently Amended) The method according to Claim 1, wherein the growth factor composition is delivered by infusion into the entorhinal cortex.
10. (Original) The method according to Claim 9, wherein the infusion is accomplished over an extended period of time via a micropump.
11. (Original) The method according to Claim 1, wherein the subject is a human.

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12. (Currently Amended) The method according to Claim 11, wherein the human is suffering from Alzheimer's disease, and the disease is ameliorated by stimulation of growth or activity in neurons of the entorhinal cortex.
13. (Original) The method according to Claim 11, wherein the disease is ameliorated by reversal of deficits in cognitive function associated with the Alzheimer's disease.
14. (Currently Amended) The method according to Claim 1, wherein the neurons innervate the hippocampal cortex.
15. (Currently Amended) The method according to Claim 1, wherein the neurons innervate the frontal cortex, parietal cortex temporal cortex or visual cortex.
16. (Currently Amended) The method according to Claim 1, wherein the subject is aged.
17. (Cancelled).
18. (Previously Presented) The method according to Claim 6, wherein the recombinant expression vector is an adeno-associated vector.
19. (New) The method according to Claim 1, wherein the stimulation or support occurs in entorhinal cortex neurons.
20. (New) The method according to Claim 1, wherein the stimulation or support occurs in hippocampal neurons.